

REMARKS

Claims in the case are 6-8 and 11-21, upon entry of this amendment. Claims 6-8, 11-13, 15, 17 and 18 have been amended, Claims 19, 20 and 21 have been added, and Claims 1-5, 9 and 10 have been cancelled herein.

Claims 1, 2, 6 and 9 have been combined to form present Claim 6, which is the only independent claim presently in the application. Basis for the coagulation step in (E)(i) of Claim 6 is found at page 22, lines 5-11 of the specification. The remaining claims in the application have been amended to change their dependencies from "Claim 1" to --Claim 6-- and/or to otherwise ensure that they better correspond with present Claim 6. Claim 12 has been amended to remove recitations of the term "or." Additional amendments to the claims will be discussed further herein.

Basis for added Claims 19 and 20 is found in original Claims 6 and 9, and at page 21, lines 7-22 of the specification. Basis for added Claim 21 is found in Claim 6 and at page 22, lines 22-23 of the specification.

Claims 2, 6, 11, 15 and 17 stand rejected under 35 U.S.C. §112, second paragraph. This rejection is respectfully traversed with regard to the amendments herein and the following remarks.

Claim 2 has been cancelled herein. Claims 6, 11 and 15 have been amended herein such that they contain proper Markush language.

Claim 17 has been amended herein such that it sets forth process steps, each beginning with a gerund. Basis for the amendments to Claim 17 are found at page 24, lines 6-15 of the specification.

In light of the amendments herein and the preceding remarks, Applicants' claims are deemed to particularly point out and distinctly claim the subject matter which they regard as their invention. Reconsideration and withdrawal of this rejection is respectfully requested.

Claim 17 stands rejected under 35 U.S.C. §101. This rejection is respectfully traversed in light of the amendments herein and the following remarks.

Claim 17 has been amended herein such that it sets forth process steps, each beginning with a gerund. Basis for the amendments to Claim 17 are found at page 24, lines 6-15 of the specification.

In light of the amendments herein and the preceding remarks, Claim 17 is deemed to represent a proper process claim under 35 U.S.C. §101.

Reconsideration and withdrawal of this rejection is respectfully requested.

Claims 1-18 stand rejected under 35 U.S.C. §102(a) as being anticipated by:
DE 197 34 661 (US 6,569,930 B1, **Eckel et al '930**);
DE 197 21 628 (US 2002/0072553, **Eckel et al '553**);
DE198 01 050 (US 6,326,423 B1, **Eckel et al '423**);
~~DE 198 56 484 (US 6,414,107 B1, **Zobel et al**);~~
DE 197 34 667 (US 6,441,068 B1, **Eckel et al '068**); or
EP 0 755 977 A2 (**Liu**).

This rejection is respectfully traversed with regard to the amendments herein and the following remarks.

Eckel et al '930 disclose a flame resistant thermoplastic molding composition that includes thermoplastic polycarbonate and fluorinated polyolefins in the form of a coagulated mixture of fluorinated polyolefin and graft copolymer. See the abstract; column 2, line 26 - column 3, line 10; and column 9, lines 21-27 of Eckel et al '930.

The composition of Applicants' present claims includes a fluorinated polyolefin which is in a form selected from:

- (i) a coagulated mixture of the fluorinated polyolefin and at least one component selected from the group consisting of component (A) {aromatic polycarbonate and/or polyester carbonate} and component (C) {graft copolymer},
the coagulated mixture being formed by mixing an emulsion of the fluorinated polyolefin with at least one of an emulsion of component (A) and an emulsion of component (C) {vinyl (co)polymers and/or polyalkylene terephthalates}, followed by coagulation (i.e., coprecipitation) of the mixture of the two emulsions; or

- (ii) a precompound of the fluorinated polyolefin and at least one component selected from the group consisting of component (A), component (B) and component (C),
the precompound being formed by dry mixing fluorinated polyolefin in powder and/or pelletized form with at least one of components (A), (B) and (C), and then melt compounding the dry mixture.

Eckel et al '930 do not disclose the fluorinated polyolefin of their composition as being in the form of a coagulated mixture of fluorinated polyolefin with either a polycarbonate or a copolymer. In addition, Eckel et al '930 do not disclose the fluorinated polyolefin of their composition as being in the form of a precompound of the fluorinated polyolefin and at least one of polycarbonate, graft copolymer and copolymer.

Eckel et al '553 disclose a flame-resistant thermoplastic molding composition that includes polycarbonate and a tetrafluoroethylene polymer in the form of a coagulated mixture of the tetrafluoroethylene polymer with a graft polymer. See the abstract; page 2, paragraph [0010] through page 3, paragraph [0025]; and page 6, paragraph [0127]-[0129]).

Eckel et al '553 do not disclose the tetrafluoroethylene polymer of their composition as being in the form of a coagulated mixture of tetrafluoroethylene polymer with either a polycarbonate or a copolymer. In addition, Eckel et al '553 do not disclose the tetrafluoroethylene polymer of their composition as being in the form of a precompound of the tetrafluoroethylene polymer and at least one of polycarbonate, graft copolymer and copolymer.

Eckel et al '423 discloses polycarbonate-ABS molding compositions that optionally contain a tetrafluoroethylene polymer in the form of a coagulated mixture of the tetrafluoroethylene polymer with a graft polymer. See the abstract; column 1, line 31 through column 2, line 25; and column 13, lines 29-50 of Eckel et al '423.

Eckel et al '423 do not disclose the tetrafluoroethylene polymer of their composition as being in the form of a coagulated mixture of tetrafluoroethylene polymer with either a polycarbonate or a copolymer. In addition, Eckel et al '423 do not disclose the tetrafluoroethylene polymer of their composition as being in the form of a precompound of the tetrafluoroethylene polymer and at least one of polycarbonate, graft copolymer and copolymer.

Zobel et al disclose a thermoplastic polycarbonate molding composition that optionally includes fluorinated polyolefins that are in the form of a coagulated mixture of emulsions of tetrafluoroethylene polymers with emulsions of graft polymers. See the abstract and column 11, lines 20-26 of Zobel et al.

~~Zobel et al do not disclose the fluorinated polyolefin of their composition as~~ being in the form of a coagulated mixture of fluorinated polyolefin with either a polycarbonate or a copolymer. In addition, Zobel et al do not disclose the fluorinated polyolefin of their composition as being in the form of a precompound of the fluorinated polyolefin and at least one of polycarbonate, graft copolymer and copolymer.

Eckel et al '068 disclose a flame-resistant, reinforced thermoplastic molding composition that includes a mixture of two aromatic polycarbonate resins and fluorinated polyolefin in the form of a coagulated mixture consisting of an emulsion of fluorinated polyolefin and an emulsion of graft polymer. See the abstract, and column 12, lines 29-51 of Eckel et al '068.

Eckel et al '068 do not disclose the fluorinated polyolefin of their composition as being in the form of a coagulated mixture of fluorinated polyolefin with either a polycarbonate or a copolymer. In addition, Eckel et al '068 do not disclose the fluorinated polyolefin of their composition as being in the form of a precompound of the fluorinated polyolefin and at least one of polycarbonate, graft copolymer and copolymer.

Liu discloses a flame resistant moldable thermoplastic resin composition that includes polycarbonate and optionally a tetrafluoroethylene polymer that is in the form of a concentrate with a resin such as polycarbonate or SAN. See the abstract and page 5, lines 38-47 of Liu.

Liu does not disclose the tetrafluoroethylene polymer concentrate of his composition as being in the form of a precompound, i.e., a precompound of fluorinated polyolefin and at least one component selected from the group consisting of polycarbonate, graft copolymer and copolymer, that is formed by dry mixing fluorinated polyolefin in powder and/or pelletized form with at least one of polycarbonate, graft copolymer and copolymer, and then melt compounding the dry mixture.

In light of the amendments herein and the preceding remarks, Applicants' claims are deemed to be unanticipated by and patentable over Eckel et al '930, Eckel et al '553, Eckel et al '423, Zobel et al, Eckel et al '068, or Liu.

~~Reconsideration and withdrawal of this rejection is respectfully requested.~~

Claims 1-18 stand rejected under 35 U.S.C. §102(b) as being anticipated by United States Patent No. 5,672,645 (**Eckel et al '645**), United States Patent No. 5,750,602 (**Köhler et al**), or United States Patent No. 5,994,463 (**Eckel et al '463**). This rejection is respectfully traversed with regard to the amendments herein and the following remarks.

Eckel et al '645 discloses a flame resistant thermoplastic molding composition that includes aromatic polycarbonate and a fluorinated polyolefin in the form of a coagulated mixture of an emulsion of tetrafluoroethylene polymer and an emulsion of graft polymer. See the abstract and column 9, lines 23-45 of Eckel et al '645.

Eckel et al '645 do not disclose the fluorinated polyolefin of their composition as being in the form of a coagulated mixture of fluorinated polyolefin with either a polycarbonate or a copolymer. In addition, Eckel et al '645 do not disclose the fluorinated polyolefin of their composition as being in the form of a precompound of the fluorinated polyolefin and at least one of polycarbonate, graft copolymer and copolymer.

Köhler et al disclose flameproofed polycarbonate/ABS blends that contain fluorinated polyolefin in the form of a coagulated mixture of an emulsion of tetrafluoroethylene polymer and an emulsion of graft polymer. See the abstract; column 1, line 26 through column 2, lines 15; and column 8, lines 15-35 of Köhler et

al.

Köhler et al do not disclose the fluorinated polyolefin of their composition as being in the form of a coagulated mixture of fluorinated polyolefin with either a polycarbonate or a copolymer. In addition, Köhler et al do not disclose the fluorinated polyolefin of their composition as being in the form of a precompound of the fluorinated polyolefin and at least one of polycarbonate, graft copolymer and copolymer.

While being cited, Eckel et al '463 is not discussed in the rejection under 35 U.S.C. §102(b) on page 4 of the Office Action of 14 May 2003, though it is both cited and discussed in the subsequent rejection under 35 U.S.C. §102(e) that begins on page 4 of the Office Action. ~~As such, it appears that Eckel et al '463 was mistakenly~~ cited in the present rejection under 35 U.S.C. §102(b). For purposes of expediency, Applicants' will address Eckel et al '463 under both rejections.

Eckel et al '463 disclose thermoplastic polycarbonate / graft polymer molding compositions that may optionally contain fluorinated polyolefins in the form of a coagulated mixture of a graft polymer emulsion in water and a tetrafluoroethylene polymer emulsion in water. See the abstract; column 7, lines 10-31; and column 8, lines 44-52 of Eckel et al '463. Eckel et al '463 do not disclose the fluorinated polyolefin of their composition as being in the form of a coagulated mixture of fluorinated polyolefin with either a polycarbonate or a copolymer. In addition, Eckel et al '463 do not disclose the fluorinated polyolefin of their composition as being in the form of a precompound of the fluorinated polyolefin and at least one of polycarbonate, graft copolymer and copolymer.

In light of the amendments herein and the preceding remarks, Applicants' claims are deemed to be unanticipated by and patentable over Eckel et al '645, Köhler et al, or Eckel et al '463. Reconsideration and withdrawal of this rejection is respectfully requested.

Claims 1-18 stand rejected under 35 U.S.C. §102(e) as being anticipated by United States Patent No. Re. 36,902 (Eckel et al '902) or Eckel et al '463. This rejection is respectfully traversed in light of the amendments herein and the following remarks.

Eckel et al '902 disclose a flame resistant thermoplastic molding composition that includes aromatic polycarbonate and a fluorinated polyolefin in the form of a coagulated mixture of an emulsion of tetrafluoroethylene polymer and an emulsion of graft polymer. See the abstract, and column 9, lines 46-67 of Eckel et al '902.

Eckel et al '902 do not disclose the fluorinated polyolefin of their composition as being in the form of a coagulated mixture of fluorinated polyolefin with either a polycarbonate or a copolymer. In addition, Eckel et al '902 do not disclose the fluorinated polyolefin of their composition as being in the form of a precompound of the fluorinated polyolefin and at least one of polycarbonate, graft copolymer and copolymer.

~~Eckel et al '463 has been discussed previously herein, and discloses~~ thermoplastic polycarbonate / graft polymer molding compositions that may optionally contain fluorinated polyolefins in the form of a coagulated mixture of a graft polymer emulsion in water and a tetrafluoroethylene polymer emulsion in water. See the abstract; column 7, lines 10-31; and column 8, lines 44-52 of Eckel et al '463.

Eckel et al '463 do not disclose the fluorinated polyolefin of their composition as being in the form of a coagulated mixture of fluorinated polyolefin with either a polycarbonate or a copolymer. In addition, Eckel et al '463 do not disclose the fluorinated polyolefin of their composition as being in the form of a precompound of the fluorinated polyolefin and at least one of polycarbonate, graft copolymer and copolymer.

In light of the amendments herein and the preceding remarks, Applicants' claims are deemed to be unanticipated by and patentable over Eckel et al '902 or Eckel et al '463. Reconsideration and withdrawal of this rejection is respectfully requested.

Claims 1-18 stand rejected under 35 U.S.C. §103(a) as being unpatentable over "the references cited in paragraphs #7, #10 and #13 in view of" United States Patent No. 5,804,654 (Lo et al). In light of the amendments herein and the following remarks, this rejection is respectfully traversed.

The rejection appears to be based on Eckel et al '930, Eckel et al '553, Eckel et al '423, Zobel et al, Eckel et al '068, Liu, Eckel et al '645, Köhler et al, Eckel et al '463 and Eckel et al '902 in view of Lo et al.

Lo et al disclose a powder that contains free flowing particles of a tetrafluoroethylene polymer that is at least partially **encapsulated** by a (co)polymer (e.g., styrene-acrylonitrile copolymers and/or acrylonitrile-butadiene-styrene copolymers). The encapsulated tetrafluoroethylene polymer of Lo et al is disclosed as being prepared by polymerizing the (co)polymer in the presence of a tetrafluoroethylene polymer latex, followed by coagulation (column 3, lines 46-54; and column 5, line 58 - column 6, line 3).

~~The coagulated mixture (E)(i) of Applicants' claims is prepared by mixing two~~ separate emulsions (i.e., an emulsion of fluorinated polyolefin and an emulsion of component (A) and/or an emulsion of component (C)), followed by coagulation (i.e., coprecipitation) thereof. See present Claim 6 herein, and page 22, lines 5-11 of the specification. A coagulated mixture prepared in accordance with Applicants' present claims does not result in the formation of fluorinated polyolefin encapsulated in a copolymer.

Lo et al **teach away** from the coagulated mixtures of Applicants' presently claimed molding compositions. Lo et al disclose a comparative polymer blend of polytetrafluoroethylene and SAN that was prepared by coagulation (coprecipitation) from a mixture of SAN latex and PTFE latex (column 6, lines 4-8). Lo et al state that the results of their experiments show that the powders obtained according to their invention have improved properties relative to the powder prepared by coagulation (column 6, lines 46-48).

Applicants submit that the Examiner has mischaracterized Lo et al in stating that Lo et al "show[s] precompounding of PTFE with a slew of polymers ...", at page 5, paragraph 17 of the Office Action. Lo et al does not disclose, or suggest precompounding of PTFE. As the preceding discussion reveals, Lo et al disclose an encapsulated tetrafluoroethylene polymer that is prepared by polymerizing the (co)polymer in the presence of a tetrafluoroethylene polymer latex, followed by

coagulation (column 3, lines 46-54; and column 5, line 58 - column 6, line 3). This is not precompounding. Lo et al does not disclose, teach or suggest mixing fluorinated polyolefin in powder and/or pelletized form with a copolymer, and then melt compounding the dry mixture thereof.

None of the other cited references disclose, teach or suggest the presence of a tetrafluoroethylene polymer that is at least partially encapsulated by a (co)polymer, in their compositions. As such Eckel et al '930, Eckel et al '553, Eckel et al '423, Zobel et al, Eckel et al '068, Liu, Eckel et al '645, Köhler et al, Eckel et al '463 and Eckel et al '902 do not provide the requisite disclosure or suggestion that would lead a skilled artisan to combine their respective disclosures, either alone or in combination, with Lo et al. Further, as Lo et al teach away from the use of coagulated mixtures of fluorinated polymer and copolymer, Lo et al provides no disclosure or suggestion that would motivate a skilled artisan to combine Lo et al with any one or more of Eckel et al '930, Eckel et al '553, Eckel et al '423, Zobel et al, Eckel et al '068, Liu, Eckel et al '645, Köhler et al, Eckel et al '463 and Eckel et al '902.

Even if Eckel et al '930, Eckel et al '553, Eckel et al '423, Zobel et al, Eckel et al '068, Liu, Eckel et al '645, Köhler et al, Eckel et al '463 and Eckel et al '902 were combined with Lo et al, applicants' claimed molding composition would not result therefrom. Particularly in light of the fact that Lo et al teach away from the use of coagulated mixtures of fluorinated polymer and copolymer.

"[T]he examiner bears the initial burden of presenting a *prima facie* case of obviousness. Only if that burden is met, does the burden of coming forward with evidence or argument shift to the applicants." *In re Rijckaert*, 9 F.3d 1531, 1532 (Fed. Cir. 1993).

In light of the preceding remarks, it is respectfully submitted that the rejection impermissibly uses Applicant's application as a blueprint for selecting and combining or modifying the prior art to arrive at Applicant's claimed invention, thereby making use of prohibited hindsight in the selection and application of that prior art. The use of hindsight reconstruction of an invention is an illogical and inappropriate process by which to determine patentability, *In re Rouffet*, 47

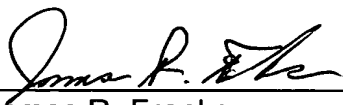
U.S.P.Q.2d 1453, 1457 (Fed. Cir. 1998). Modifying "prior art references without evidence of such a suggestion, teaching or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability -- the essence of hindsight." *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999) (citations omitted). One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. *In re Fine*, 837 F.2d 1071, 1075 (Fed. Cir. 1988).

In light of the amendments herein and the preceding remarks, Applicants' claims are deemed to be unobvious and patentable over Eckel et al '930, Eckel et al '553, Eckel et al '423, Zobel et al, Eckel et al '068, Liu, Eckel et al '645, Köhler et al, Eckel et al '463 and Eckel et al '902 in view of Lo et al. Reconsideration and withdrawal of this rejection is respectfully requested.

In light of the amendments herein and the preceding remarks, Applicants' presently pending claims are deemed to meet all the requirements of 35 U.S.C. §§ 101 and 112, and to define an invention that is unanticipated, unobvious and hence, patentable. Reconsideration of the rejections and allowance of all of the presently pending claims is respectfully requested.

Respectfully submitted,

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